What is claimed is:

1 ~~Sub~~ B' ~~at~~ 1. A method comprising:

2 generating data associated with a <u>source video sequence</u>,

3 at least a first body of data being sufficient to permit

4 generation of a first viewable video sequence of lesser

5 quality than is represented by the source video sequence, and

6 at least a second body of data being sufficient to enhance the

7 quality of the first viewable video sequence generated from

8 the first body of data, and

9 adjusting the second body of data to give transmission

10 priority to different units of the second body of data,

11 according to the amount of detail within the units.


1 2. The method of claim 1, wherein the units of the

2 second bodies of data include a block of video data.


1 3. The method of claim 1, further comprising

2 determining a detail by processing the data with a discrete

3 cosine transform, the amount of detail corresponding to the

4 coefficients of the higher-frequency terms.

- 18 -

19

1  4.   The method of claim 3, further comprising giving

2  generally higher transmission priority to lower-frequency

3  terms and generally lower transmission priority to higher-

4  frequency terms.

1  5.   The method of claim 1, further comprising

2  determining a transmission priority according to a frequency

3  weighting matrix.

1  6.   The method of claim 1, further comprising

2  determining a transmission priority according to an amount of

3  data lost in the first body of data during the first body's

4  generation.

1  7.   The method of claim 1, further comprising, following

2  reception of the second body of data, undoing the operation

3  that adjusted the second body of data.

1  8.   An article comprising a computer-readable medium

2  which stores computer-executable instructions, the

3  instructions causing a computer to:

- 19 -

4      generate data associated with a source video sequence, at

5   least a first body of data being sufficient to permit

6   generation of a viewable video sequence of lesser quality than

7   is represented by the source video sequence, and at least a

8   second body of data being sufficient to enhance the quality of

9   the viewable video sequence generated from the first body of

10  data, and

11     adjust the second body of data to give transmission

12  priority to different units of the second body of data,

13  according to the amount of detail within the units.

9.    The article of claim 8, wherein the units of the

second bodies of data include a block of video data.

1      10.   The article of claim 8, the instructions further

2   causing the computer to determine a detail by processing the

3   data with a discrete cosine transform, the amount of detail

4   corresponding to the coefficients of the higher-frequency

5   terms.

1      11.   The article of claim 10, the instructions further

2   causing the computer to give generally higher transmission

3    priority to lower-frequency terms and generally lower

4    transmission priority to higher-frequency terms.

1        12.   The article of claim 8, the instructions further

2    causing the computer to determine a transmission priority

3    according to a frequency weighting matrix.

1        13.   The article of claim 8, the instructions further

2    causing the computer to determine a transmission priority

3    according to an amount of data lost in the first body of data

4    during the first body's generation.

1        14.   The article of claim 8, the instructions further

2    causing the computer, following reception of the second body

3    of data, to undo the operation that adjusted the second body

4    of data.

1        15.   The method for encoding a video sequence of

2    pictures, comprising:

3        applying lossy encoding to the sequence of pictures to

4    produce a first body of data being sufficient to permit

5    generation of a viewable video sequence of lesser quality than

6    is represented by the source video sequence,

7        deriving a second body of data being sufficient to

8    enhance the quality of the viewable video sequence generated

9    from the first body of data, and

10        adjusting the second body of data to give transmission

11    priority to different units of the second body of data,

12    according to the amount of detail within the units.

16.    The method of claim 15, further comprising

determining the detail by processing the data with a discrete

cosine transform, the amount of detail corresponding to the

coefficients of the higher-frequency terms.

1        17.    The method of claim 16, further comprising giving

2    generally higher transmission priority to lower-frequency

3    terms and generally lower transmission priority to higher-

4    frequency terms.

1    18. The method of claim 15, further comprising

2    determination of transmission priority according to a

3    frequency weighting matrix.


1    19. The method of claim 15, further comprising

2    determination of transmission priority according to the amount

3    of data lost in the first body of data during the first body's

4    generation.


1    20. The method of claim 15, further comprising adjusting

2    the second body of data in a manner that the adjustment may be

3    undone by a decoder.


1    21. An article comprising a computer-readable medium

2    which stores computer-executable instructions for encoding a

3    video sequence of pictures, the instructions causing a

4    computer to:

5    apply lossy encoding to the sequence of pictures to

6    produce a first body of data being sufficient to permit

7    generation of a viewable video sequence of lesser quality than

8    is represented by the source video sequence,

9         derive a second body of data being sufficient to enhance

10      the quality of the viewable video sequence generated from the

11      first body of data, and

12         adjust the second body of data to give transmission

13      priority to different units of the second body of data,

14      according to the amount of detail within the units.

         22.   The article of claim 21, the instructions further

causing the computer to determine the detail by processing the

data with a discrete cosine transform, the amount of detail

corresponding to the coefficients of the higher-frequency

terms.

         23.   The article of claim 22, the instructions further

causing the computer to give generally higher transmission

priority to lower-frequency terms and generally lower

transmission priority to higher-frequency terms.

1         24.   The article of claim 21, the instructions further

2      causing the computer to determine of transmission priority

3      according to a frequency weighting matrix.

1    25.   The article of claim 21, the instructions further

2    causing the computer to determine of transmission priority

3    according to the amount of data lost in the first body of data

4    during the first body's generation.

1    26.   The article of claim 21, the instructions further

2    causing the computer to adjust the second body of data in a

3    manner that the adjustment may be undone by a decoder.

27.   A system for encoding and decoding a video sequence

of pictures, comprising:

an encoder capable of

        generating a first body of data sufficient to permit

5        generation of a viewable video sequence of lesser quality

6        than is represented by the source video sequence,

7        generating a second body of data being sufficient to

8        enhance the quality of the viewable video sequence

9        generated from the first body of data,

10       adjusting the second body of data to give

11       transmission priority to different units of the second

12    body of data, according to the amount of detail within

13    the units, and

14    a decoder capable of undoing the adjustment made by the

15    encoder.


1     28.   The system of claim 27, wherein the decoder is

2     further capable of performing decoding operations on the first

3     body of data, including variable length decoding, inverse

      quantization, inverse scanning, inverse discrete cosine

      transformation or motion compensation.


      29.   The system of claim 27, wherein the decoder is

      further capable of performing decoding operations on the

3     second body of data, including variable length decoding,

4     inverse quantization or inverse discrete cosine

5     transformation.


1     30.   The system of claim 27, wherein the decoder is

2     further capable of combining the first body with the second

3     body of data.